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PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional)
	08894984US

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	Application Number	Filed
	10/774,638	07/02/2002
on _____ Signature_____	First Named Inventor Burdett, Gregory	
Typed or printed name _____	Art Unit 2132	Examiner Herring, Virgil A

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
       Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
    See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
    (Form PTO/SB/96)

☐ attorney or agent of record.
    Registration number _____

☑ attorney or agent acting under 37 CFR 1.34.

    Registration number if acting under 37 CFR 1.34 __57,089__

_____
Signature

__Xiang Lu__
Typed or printed name

__(613) 786-8660__
Telephone number

__November 22, 2006__
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Burdett, Gregory; Mistry, Nalin; Fung, Bryant;

Serial No.	: 10/774638	Group Art Unit :	2132
Filed	: July 2, 2002	Examiner	: Herring, Virgil A.
For	: Method and Apparatus for Accelerating CPE-based VPN Transmissions Over a Wireless Network		
Date	: November 22, 2006	Docket No.	: 08894984US

Mail Stop: AF

The Honorable Commissioner of Patents and Trademarks,

P.O. Box 1450

ALEXENDRIA, VIRGINIA 22313-1450

UNITED STATES OF AMERICA

Pre-Appeal Brief Request For Review

Sir:

Pursuant to 1296 Off. Gaz. 2 (July 12, 2005), Applicant requests review of the final rejection of claims 1-11 in the above-identified application. No amendments are being filed with this Request. This Request is being filed with a Notice of Appeal.

Arguments begin on page 2 of this paper.

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Arguments

Claims 1 to 11 are pending in this case. Claims 1 to 11 were rejected under 35 U.S.C. 103(a) as
being unpatentable over Chuah et al. (US Patent 6,496,491) hereinafter referred as Chuah, and in
view of Gleeson et al., (US Patent No. 5,446,736), hereinafter referred as Gleeson.

Applicant respectfully submits that the rejection of Applicant's claims in the final Office Action
mailed August 22, 2006 is improper and without basis. Applicant provided arguments in a
Response to an Office Action, filed on June 5, 2006, hereinafter referred to as R1 as to why
Chuah and Gleeson, alone or in combination does not teach or suggest the claimed invention.

Encrypted acceleration channel not a VPN channel

Applicant stated in R1:

> "Chuah therefore does not teach or suggest establishing 'an encrypted acceleration
> tunnel between a VPN acceleration client and a VPN acceleration server' as claimed by
> the present application. As stated throughout the disclosure, for example at page 11,
> lines 10 to 13, the encrypted acceleration tunnel over the air interface is not a VPN
> channel, and therefore does not have the problem of dropped VPN connection due to
> coverage issues." [emphasis added]

Examiner was silent on this point in the final Office Action.

"Teach-Away" by Chuah

Applicant stated in R1:

> "Therefore, Chuah clearly teaches away from the present invention by establishing a
> direct VPN connection between the client 805 and the NAS server 815, and introducing
> new control messages (column 9, lines 6 to 41) for hand-off between servers, as
> compared to the claimed invention of the present application by using an encrypted
> acceleration tunnel between a VPN acceleration client and a VPN acceleration server.
> [emphasis added]

In the "Response to Arguments" in the final Office Action mailed August 22, 2006, the Examiner
stated "that Chuah cannot possibly teach away from the claimed invention when both Chuah and
the claimed invention detail the steps of establishing VPN communications between a wireless
device and an enterprise network."

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It appears to be that the Examiner misinterpreted the claimed invention.

In Chuah, as stated by the Examiner, a VPN connection from the wireless device 805 to element
815 is established. In contrast, in the claimed invention "an encrypted acceleration tunnel between
a VPN acceleration client and a VPN acceleration server" is established. As stated in R1 and
discussed above, the encrypted acceleration tunnel over the air interface is not a VPN channel,
and therefore "one can ensure VPN permanence as the problem of dropped VPN connections
due to coverage issues, is avoided" (page 11, lines 13-14).

In other words, the present invention uses an encrypted non-VPN tunnel between a VPN
acceleration client and a VPN acceleration server to overcome the problem of dropped VPN
connections, while Chuah uses a VPN tunnel and new control messages to address the hand-
over of the existing PPP connection from one switching element to another. Therefore, Chuah
teaches a complete different approach to an arguably similar problem.

Gleeson 's additional layer in an OSI model

Applicant stated in R1:

> "Gleeson teaches the insertion of <u>an additional optimization layer into the protocol stack</u>
> <u>between the existing layers</u>. The exact location of this additional optimization layer is
> defined (column 9, lines 19 -21). As stated at column 4, lines 1 to 4, the *"data packet*
> *stream passing through the standard protocol stack is converted in the optimization*
> *layer"*. As described for example, at column 13, line 23 to column 14, line 59, and in
> Figure 11, the optimization layer of Gleeson introduces new header, new fields, and
> require the conversions at both client and server sides. [emphasis added]

In the Office Action mailed March 3, 2006, and again at page 6 of the final Office Action mailed on
August 22, 2006, the Examiner stated that the optimization layer of Gleeson, which is sandwiched
between the existing network and datalink layers, equals to the "acceleration" of the present
application.

This is not correct.

The "acceleration" of the present invention is directed to various wireless communication
performance optimization techniques as stated throughout the specification, for example, at page
3, lines 5-13:

> "The prior art CPE-VPN described above has a number of drawbacks that limit its use for
> the secure transfer of electronic information. One of the major drawbacks is its inability to

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utilize various <u>wireless communication performance optimization techniques</u> including compression, protocol optimization, caching, and traffic management. Collectively the application of these techniques to a wireless signal can be referred to as signal "acceleration." As will be apparent to one skilled in the art, <u>it is the acceleration server [120] that applies these acceleration</u> algorithms to the signal to improve the performance of the data flow <u>over the bandwidth limited wireless connection</u>. "[emphasis added]

as well as at page 8, lines 7-12; and at page 10, lines 18-21.

The Examiner further stated that "the 'acceleration' is performed by using transmission optimization techniques in the network layer".

This is not correct.

Applicant stated at page 4, line 21 to page 5, line 3:

"As mentioned above, the major drawback of traditional CPE-VPNs is their inability to accelerate a secure tunnel transmission over the wireless network. The reason the CPE-VPNs cannot accelerate such secure tunnel transmissions because <u>the aforementioned optimization performance techniques operate on the transport layer and up</u> (fourth layer) <u>of the OSI standard</u>, whereas the encryption occurs on the network layer (third layer). That is to say, the signal cannot be accelerated as it bypasses the acceleration server [120] in a lower layer encrypted tunnel." [emphasis added]

In fact, "accelerating and encrypting by said VPN acceleration server and transmitting said required data to said VPN acceleration client" is one aspect of the present invention to overcome the major drawback of traditional CPE-VPNs.

<u>Motivation for Combination of Chuah and Gleeson</u>

As stated above, Applicant's claimed invention includes an encrypted acceleration tunnel which is a non-VPN tunnel; Chuah teaches a different approach to solve the "hand-off" problem; and Gleeson teaches an additional optimization layer unrelated to wireless communication performance optimization techniques.

The Examiner failed to show any teaching, suggestion or incentive supporting the combination of cited references to produce the claimed invention.

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"inherent, see below"

The Examiner marked several limitations in the independent claims as "inherent, see below", and stated that "[c]ommunications in a Virtual Private Network must necessarily be encrypted to protect the privacy of the network".

However, this is insufficient, at least, to render the last two limitations of claim 1 as inherent to VPN. Decrypting the required data at the VPN acceleration server; accelerating and encrypting by the VPN acceleration server and transmitting the required data to the VPN acceleration client is not inherent to a normal VPN operation, rather, it is a characteristic of sending data over a non-VPN encrypted acceleration tunnel.

Conclusion

The arguments presented herein are for the purpose of panel review of clear errors in the rejections, and thus Applicant reserves the right to present additional arguments not expressly presented or discussed herein.

For at least the foregoing reasons, Applicant submits that the rejections of claims 1-11 are improper and without basis. Accordingly, Applicant respectfully requests that the panel issue a written decision withdrawing the rejection of claims 1-11.

Respectfully Submitted,

Xiang Lu
Registration No. 57,089

c/o   GOWLING LAFLEUR HENDERSON LLP
            160 Elgin Street, Suite 2600
            Ottawa, Ontario
            K1P 1C3
            CANADA

Telephone: (613) 233-1781
Facsimile: (613) 563-9869